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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Registrant Response to 1/21/87 EEB Review -- Sulfosate

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TO: Robert J. Taylor
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In response to the 1-21-87 EEB review of proposed sulfosate use on noncropland, the registrant (Stauffer Chemical Company) has submitted two letters (dated 3-13-87 and 3-20-87) and addenda (dated 3-20-87) to three previously-submitted aquatic acute toxicity studies (original studies under Accession No. 250545).

The 3-13-87 letter refers to label changes to 1) remove reference to ditch banks, dry canals and ditches, dry irrigation ditches during noncrop seasons, headlands, and forest planting sites; 2) prohibit application to wetlands or other aquatic habitat; and 3) prohibit aerial application. While EEB agrees that these changes should reduce the potential for contamination of aquatic habitat, they may not eliminate it. Aquatic exposure modeling by Richard Lee of EEB should determine whether runoff of the SC-0224 4-LC formulation could still pose a hazard to aquatic organisms. Also, the label should clearly indicate in what noncrop areas use is permitted, and that use in any other areas is prohibited. It would not be sufficient for the registrant to simply delete uses from a "suggested" list on the label, if the label remains for use on noncrop in general.

The 3-13-87 letter claims, given the proposed label changes, that the chronic aquatic studies and plant protection studies requested by EEB are no longer needed. However, the requirements for these tests are not dependent upon direct aquatic application. For example, the chronic aquatic studies may be requested if the herbicide could transport to water and the aquatic half-life is greater than four days (see 40 CFR 158.145, 40 CFR 158.150, and the 1-21-87 EEB review). The requested studies are still required.

Exposure Assessment Branch should comment on the claim in the registrant's 3-13-87 letter that anaerobic aquatic metabolism and forestry dissipation studies are no longer needed. The 3-20-87 study addenda claim that "environmental chemistry data as per the June 20, 1986 review have been submitted to the Agency." This would appear to be incorrect, since the above two studies were requested in the EAB review (dated 6-30-86, not 6-20-86). EEB requires the EAB review of photodegradation and terrestrial field dissipation data requested in the 6-30-86 EAB review, for use in modeling aquatic exposure from runoff.

The clarifications regarding photoperiod and composition of test material in the 3-20-87 study addenda allow the three SC-0224 4-LC acute aquatic studies to be upgraded to Core for this formulation. The percent ai in the tested formulation, as claimed in the addenda, differs slightly from that claimed in the 3-13-87 letter. Since the addenda include an explanation and attach an assay, it will be assumed to be the correct value.

Endangered species labeling will be required, as noted in the 1-21-87 EEB review. Specific label language will be forwarded following formal consultation with USFWS (and/or possible assumptions of jeopardy based on existing case-by-case Biological Opinions, with USFWS concurrence).

In conclusion, EEB has reviewed the recent submissions regarding the proposed registration of sulfosate for use on noncropland. EEB is unable to complete a full risk assessment because pertinent ecological effects and environmental chemistry data are still lacking:

1. EAB-reviewed photodegradation and terrestrial field dissipation data cited in the 6-30-86 EAB review, to assist in modeling aquatic exposure from runoff;
2. fish embryolarvae and aquatic invertebrate life cycle studies with sulfosate technical and SC-0224 4-LC;
3. Tier I Plant Protection studies (40 CFR 158.150), with SC-0224 4-LC; and
4. Acute aquatic studies (using bluegill sunfish, rainbow trout, D. magna) with the SC-0224 4-LC [REDACTED]

Please note our label comments regarding the prohibition of certain uses. Complete label comments cannot be made until completion of consultation with USFWS and the review of the above data.

INERT INGREDIENT INFORMATION IS NOT INCLUDED